CLAIMS

1. (Previously Presented) A method for use in a communication network, the method comprising advertising an amount of available bandwidth for a link in response to said available bandwidth having crossed any one of a plurality of fixed bandwidth thresholds,

wherein said communication network allocates bandwidth to circuits established over said link in discrete bandwidth amounts,

and wherein said plurality of bandwidth thresholds are each a function of said discrete bandwidth amounts.

2. Canceled.

3. (Previously Presented) The method of claim 1 wherein said plurality of bandwidth thresholds are each a predetermined amount smaller than a respective one of said discrete bandwidth amounts.

4. (Previously Presented) The method of claim 1 wherein individual circuits set up over said link each utilize a respective number of time slots, and wherein each of said discrete bandwidth amounts corresponds to a respective number of said time slots.

5. (Original) The method of claim 4 wherein each of said individual circuits is an STS-N circuit having N time slots, where N is a value selected for each circuit from among a predefined set of values.

6. (Original) The method of claim 1 wherein said network utilizes a predefined routing protocol, said protocol including routing messages that are communicated among switches within said communication network, and wherein an individual one of said messages is an available bandwidth message that is

transmitted, by at least one of said switches to which said link is connected, to at least another one of said switches.

7. (Original) The method of claim 6 wherein said predefined routing protocol is PNNI and wherein said available bandwidth message is a link PTSE defined by said PNNI protocol.

8. (Previously Presented) A method for use in a communication network comprising a plurality of switches interconnected by a plurality of links, the method comprising

setting up circuits through said network, each circuit being set up over a path that includes two or more of said switches and one or more of said links and each circuit having a particular amount of bandwidth selected from a plurality of predetermined circuit bandwidths, and

responsive to a request to set up through said network an additional circuit having a desired amount of bandwidth, identifying a path through said network that includes links each having at least that amount of available bandwidth,

wherein it is determined how much bandwidth each link has available from available bandwidth messages transmitted within said network, each of the available bandwidth messages indicating an amount of available bandwidth for a respective link, each of at least ones of said available bandwidth messages being transmitted responsive to a determination that the available bandwidth of a particular link has either a) increased from a previous value to a value at least equal to the next higher one of said predetermined circuit bandwidths or b) has decreased from a previous value to a value that is lower than the next lower one of said predetermined circuit bandwidths.

9. (Original) The method of claim 8 wherein said circuits each utilize a respective number of time slots, and wherein each of said predetermined circuit bandwidths corresponds to a respective number of said time slots.

10. (Original) The method of claim 9 wherein each of said circuits is an STS-N circuit having N time slots, where N is a value selected for each circuit from among a predefined set of values.

11. (Original) The method of claim 8 wherein said network utilizes a predefined routing protocol, said protocol including routing messages that are communicated among switches within said communication network, said routing messages including said available bandwidth messages, and wherein said available bandwidth messages are transmitted by at least ones of said switches to others of said switches.

12. (Currently Amended) The method of claim 11 wherein said predefined routing protocol is PNNI and wherein said available bandwidth ~~message~~ messages are link PTSEs ~~is a link PTSE~~ defined by said PNNI protocol.

13.-16. Canceled

17. (Previously Presented) A telecommunications switch adapted to carry out the method of any one of claims 1 or 3 through 7.

18. (Original) A telecommunications network adapted to carry out the method of any one of claims 8 through 12.